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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/886,304 | 06/21/2001 | Leo Larsen | 660.305USW1 | 5741 |

7590 12/24/2003

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Minneapolis, MN 55343

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| EXAMINER |
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LEE, PING

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| ART UNIT | PAPER NUMBER |
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2644

DATE MAILED: 12/24/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/886,304

Applicant(s)

LARSEN ET AL.

Examiner

Ping Lee

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 2 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall et al (WO 98/47311) in view of Larsen (US 5,058,155).

Hall et al (hereafter Hall) discloses a headset for connection to a telephone apparatus. Regarding claim 1, Hall shows, in Fig. 1, the capsule (120) with a built-in receiver (128), a boom with a microphone (126), and manual operation elements (124). Hall fails to show the wire and the amplification and adjustment circuits. Hall teaches a general headset assembly. One skill in the art would have expected that any

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amplification and adjustment circuits could be used and placed on the Hall's circuit board (p. 3) without generating any unexpected result.

Larsen teaches an amplification and adjustment circuit (Fig. 2) for a headset. The manual adjustments switch elements for changeover are included. Larson teaches that the amplification and adjustment circuit is separated from the headset. One skilled in the art would have expected that the same circuit (15) could be an integral part of the headset without changing the operation of the amplification and adjustment. Of course, with added the circuit, one skilled in the art would have expected that the headset would weight heavier. Thus, it would have been obvious to one of ordinary skill in the art to modify Hall's headset by incorporating the amplification and adjustment circuit as taught in Larsen into the circuit board for providing proper signal transmitting and receiving.

Furthermore, it was considered as a matter of design choice to use a one piece construction instead of several separate pieces. In re Larson, 144 USPQ 347 (CCPA 1965).

Regarding claim 2, Larsen shows the microphone switch (8) and sound level operating element (19).

Regarding claims 6-9, Larsen shows the sound level control.

Regarding claim 10, Hall and Larsen both show the battery. Larsen further shows the battery power controls the amplifiers.

4. Claims 1, 2, and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsen in view of Hall.

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Larsen discloses a headset for connection to a telephone apparatus. Regarding claims 1, 2, and 6-10, Hall shows, in Fig. 1, the capsule with a built-in receiver, a boom with a microphone (11). Hall shows the manual operation elements (16-19), the wire, an amplification and adjustment circuit and the switch elements for changeover for a headset, but fails to show that these elements are to be included in the capsule with speaker. Larsen teaches that the amplification and adjustment circuit is separated from the headset. One skilled in the art would have expected that the same circuit (15) could be an integral part of the headset (4) without changing the operation of the amplification and adjustment. Of course, with added the circuit, one skilled in the art would have expected that the headset would weight heavier. Hall teaches a headset with a capsule having circuit board and manual controls (p.3). Thus, if weight is not a concern, it would have been obvious to one of ordinary skill in the art to modify Larsen's headset by incorporating the amplification and adjustment circuit into the capsule with speaker, similar as the one shown in Hall, in order to provide an integral headset housing.

Furthermore, it was considered as a matter of design choice to use a one piece construction instead of several separate pieces. In re Larson, 144 USPQ 347 (CCPA 1965).

Regarding claim 2, Larson shows the microphone switch (8) and sound level operating element (19).

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall in view of Larsen as applied to claim 1 above, and further in view of Williamson, III (US 5,371,803).

Regarding claims 4 and 5, Hall and Larsen fail to show the band pass filter.

Williamson, III (hereafter Williamson) teaches a tone control circuit, having a band pass circuit, for a headset. Thus, it would have been obvious to one of ordinary skill in the art to further modify Hall's system in view of Larsen by having the tone control circuit as taught in Williamson in order to selectively attenuate the high frequency signal and enhance the speech.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsen in view of Hall as applied to claim 1 above, and further in view of Williamson, III (US 5,371,803).

Regarding claims 4 and 5, Hall and Larsen fail to show the band pass filter.

Williamson, III (hereafter Williamson) teaches a tone control circuit, having a band pass circuit, for a headset. Thus, it would have been obvious to one of ordinary skill in the art to further modify Larsen's system in view of Hall by having the tone control circuit as taught in Williamson in order to selectively attenuate the high frequency signal and enhance the speech.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hall in view of Larsen as applied to claim 1 above, and further in view of Gancarcik (US 5,832,075).

Regarding claim 3, Hall and Larsen fail to show the micro-controller. Gancarcik teaches a microcontroller for controlling a circuit generating a hook switch flash signal without interfering the call in progress. Thus, it would have been obvious to one of ordinary skill in the art to further modify Hall's system in view of Larsen by having the

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microcontroller and the corresponding circuit as taught in Gancarcik in order to allow the headset to be connected to the telephone without causing any interference during the call.

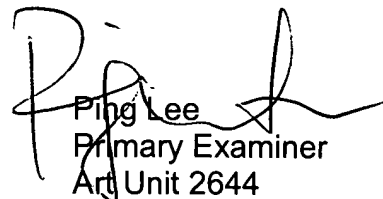
8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Larsen in view of Hall as applied to claim 1 above, and further in view of Gancarcik (US 5,832,075).

Regarding claim 3, Hall and Larsen fail to show the micro-controller. Gancarcik teaches a microcontroller for controlling a circuit generating a hook switch flash signal without interfering the call in progress. Thus, it would have been obvious to one of ordinary skill in the art to further modify Larsen's system in view Hall of by having the microcontroller and the corresponding circuit as taught in Gancarcik in order to allow the headset to be connected to the telephone without causing any interference during the call.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 703-305-4865. The examiner can normally be reached on Monday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.


Ping Lee
Primary Examiner
Art Unit 2644

pwl
December 15, 2003